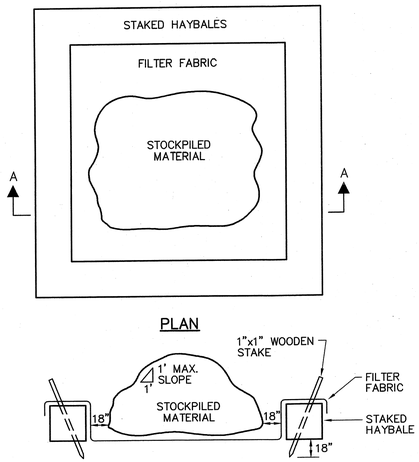
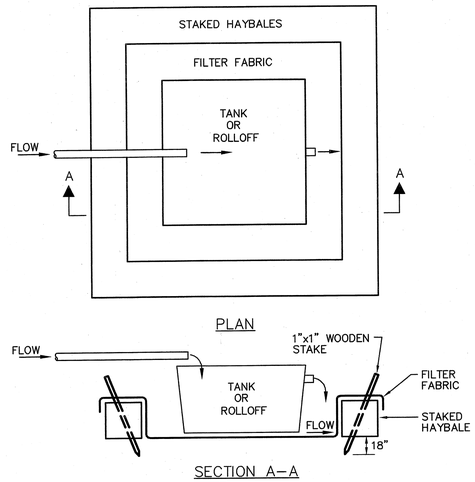


NOTE:
DIMENSIONS OF STOCKPILE AREA MAY VARY DEPENDING ON QUANTITY OF EXCAVATION. AVOID OVERTOPPING OR SLOPES IN EXCESS OF 1:1

PLAN OF TEMPORARY STOCKPILE AREA

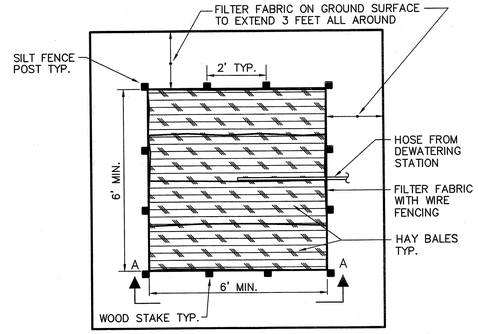
NOT TO SCALE



NOTE:
DIMENSIONS OF SEDIMENTATION BASINS MAY VARY DEPENDING ON QUANTITY OF WATER TO BE PUMPED IN EACH AREA.
AVOID OVERTOPPING.

SEDIMENTATION BASIN FOR DEWATERING OPERATIONS

NOT TO SCALE



NOTE:
DIMENSIONS OF SEDIMENTATION BASINS MAY VARY DEPENDING ON QUANTITY OF WATER TO BE PUMPED IN EACH AREA.

SEDIMENTATION BASIN

NOT TO SCALE

MINIMUM

BEARING AREA – FT.^{2}

PIPE DIAMETER (INCHES)	TEES, DEAD ENDS VALVES	90° BENDS	45° BENDS	22 1/2° BENDS	11 1/4° BENDS
4	2.0	2.0	2.0	2.0	2.0
6	2.5	3.6	2.0	2.0	2.0
8	4.4	6.2	3.3	2.0	2.0
10	6.5	9.2	5.0	2.6	2.0
12	8.9	12.6	6.8	3.4	2.0

1. BEARING AREAS, BASED ON SOIL BEARING CAPACITY OF 4,000 PSF. MINIMUM BEARING AREA IS 2.0 SQUARE FEET.

2. IF SOIL HAS DIFFERENT BEARING CAPACITY THAN NOTED, NEW BEARING CAN BE CALCULATED BY RATIO I.E., IF SOIL HAS BEARING OF 2,000 PSF, MULTIPLY TABULATED VALUE BY 4/2.

3. TABLE IS FOR HORIZONTAL RESTRAINT ONLY.

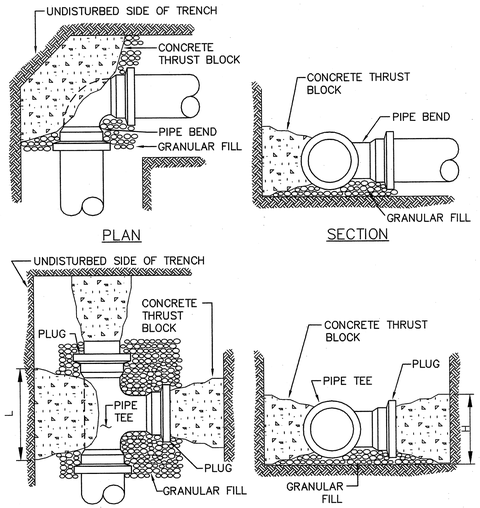
4. VALUES SHOWN ARE FOR TEST PRESSURE OF 150 PSI WITH A 100 PSI SURGE ALLOWANCE.

5. THRUST BLOCKS SHALL NOT BE PLACED AGAINST THE FOLLOWING SOILS: A) PEAT, ORGANIC SILT AND ORGANIC SOILS; B) SOFT CLAY; C) RUBBISH FILL AND OTHER UNSUITABLE ARTIFICIAL FILL; D) SHATTERED SHALE; E) INORGANIC SILT AND VERY FINE SANDS.

6. WHERE POSSIBLE, POUR CONCRETE ANCHOR BLOCKS AGAINST UNDISTURBED EARTH. OTHERWISE, PLACE COMPACTED BACKFILL USING GRAVEL AND WELL GRADED SAND AFTER REMOVING FORMS.

7. BACKFILL SHOULD BE COMPACTED TO AT LEAST 90 PERCENT OF MAXIMUM DRY UNIT WEIGHT DETERMINED BY ASTM TEST DESIGNATION D–1557.

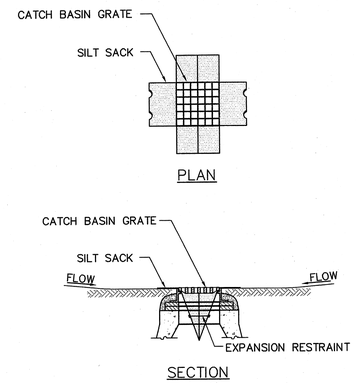
MINIMUM THRUST BLOCK SIZING FOR FORCE MAINS



NOTE:
ALL FITTINGS TO BE PLACED ON WELL CONSOLIDATED GRAVEL BLOCK HEIGHT (H) SHOULD BE APPROXIMATELY 1/2 LENGTH (L) AT SOIL BEARING FACE.

TYPICAL THRUST BLOCK PLACEMENT ON BENDS, TEES AND PLUGS–FORCE MAINS

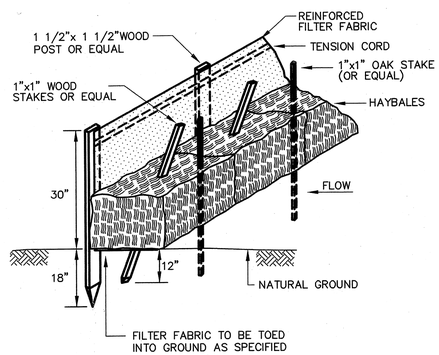
NOT TO SCALE



NOTES:
1. INSTALL SILT SACK IN ALL CATCH BASINS BEFORE COMMENCING WORK
2. GRATE TO BE PLACED OVER SILT SACK.
3. SILT SACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.

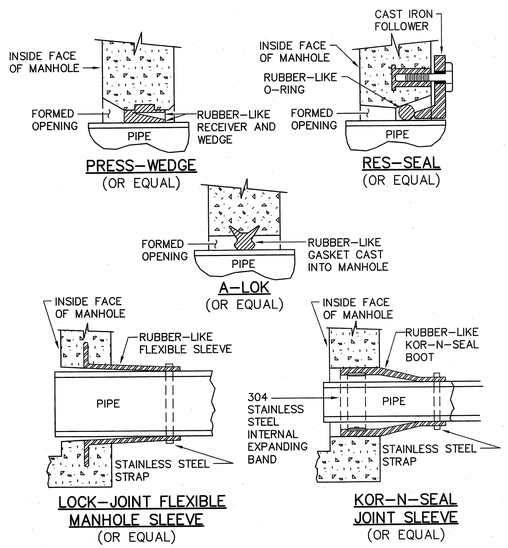
SILT SACK SEDIMENT TRAP

NOT TO SCALE



SILTATION / EROSION CONTROL BARRIER

NOT TO SCALE



NOTE:
ALL GASKETS, SEALANTS, MORTAR ETC. SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS.

TYPICAL SLEEVE DETAILS

NOT TO SCALE

FOR ENVIRONMENTAL PERMITTING REVIEW NOT FOR CONSTRUCTION

COMMONWEALTH OF MASSACHUSETTS
JAMES R. BARSANTI
CIVIL
No. 39401
REGISTERED PROFESSIONAL ENGINEER
8/18/08

PROJECT START DATE (M / Y)	AUGUST/2008
PROJECT NO.	98577
FILENAME	98577-DESIGN.dwg
SHEET NO.	4
DRAWING NO.	

SM-4366

VERIFY SCALE IF PLAN SHEET IS REDUCED
1-INCH

REV	DESCRIPTION	DRN	CHK	DATE (M/D/Y)

DRN BY: DMG
DES BY: DMG
CHK BY: BML
APP BY: —

PREPARED BY:
EARTH TECH | AECOM
300 BAKER AVENUE SUITE 280
CONCORD, MA 01742 1-978-371-4000

NORTH ACTON TREATMENT CORP.
CLUBHOUSE PUMP STATION NO. 3 REPLACEMENT
NAGOG PARK, ACTON, MASSACHUSETTS

DETAILS

Plotted By: david.graham
Plot File Date Created: Aug/18/2008 1:12 PM
Layout-Sheet Name: SHEET 4
Filename: L:\WORK\98577\CAD\CLUBHOUSE PUMPING STATION\98577-DESIGN.DWG